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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHRISTOPHER F. PARKER, DONALD W. BLACK,
and MARY D. BLACK

Appeal 2009-005496
Application 10/618,208
Technology Center 2100

Decided: April 16, 2010

Before JOSEPH L. DIXON, STEPHEN C. SIU, and
DEBRA K. STEPHENS, *Administrative Patent Judges*.

SIU, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-38. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

Invention

The invention relates to a system and methods for updating the structure of a database without restricting a user's access to the database during the update operation (§ [0001]).

Independent claim 1 is illustrative:

1. A database update method, comprising:
 - receiving a database change command to alter the structure of a target data base;
 - determining one or more portions of the target database that will be affected by the change command;
 - creating one or more shadow portions of the determined one or more portions;
 - changing the one or more shadow portions in accordance with the change command;
 - executing the change command against the target database; and
 - swapping the one or more shadow portions for the determined one or more portions,wherein the act of creating and changing occur before the act of executing and further wherein said database update method does not cause a user outage.

References

The Examiner relies upon the following references as evidence in support of the rejection:

Friske

US 6,070,170

May 30, 2000

Marshall

US 2003/0135478 A1

Jul. 17, 2003

Rejection

Claims 1-38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Friske and Marshall.

ISSUE

The Examiner finds that Friske is directed to changing the structure of a database because Friske “explicitly state[s] that [its] invention is meant to include data indexes as well as the data itself” (Ans. 10). The Examiner further finds that “Marshall discloses reorganization reclaims unusable space and . . . once the unused portion is reclaimed and changes to the data have occurred the index still needs to be updated and rebuilt” (*id.*).

Appellants argue that “rebuilding indices is akin to shuffling data within an existing database – neither alter in any manner the structure of the database” (Reply Br. 2).

Issue: Did the Examiner err in finding that Friske and Marshall would have taught or suggested receiving a database change command directed to changing the structure of a database?

FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

1. Appellants describe a database as being characterized as comprising two types of “objects” – data objects and index objects . . . [which] are organized and

managed through a system catalog or data dictionary
[A] system catalog identifies the structure (schema) of each
table in its database and any indices associated with those
tables.

(Spec. ¶ [0002]).

2. Friske teaches responding to “a data reorganization request”
(col. 5, ll. 64-65), where “[t]he target data set may include data
indexes which, after the target data set has been reorganized, may
be rebuilt into reorganized data indexes” (col. 7, ll. 58-60).
3. Marshall teaches “[a] database reorganization process [that] may
include updates of the database” (¶ [0038]).

PRINCIPLES OF LAW

Claim interpretation

“In the patentability context, claims are to be given their broadest
reasonable interpretations. . . . [L]imitations are not to be read into the
claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed.
Cir. 1993) (citations omitted). A claim meaning is reasonable if one of
ordinary skill in the art would understand the claim, read in light of the
specification, to encompass the meaning. *See In re Am. Acad. of Sci. Tech
Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

Obviousness

The question of obviousness is resolved on the basis of underlying
factual determinations including (1) the scope and content of the prior art,
(2) any differences between the claimed subject matter and the prior art, and

(3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

ANALYSIS

Based on Appellants' arguments in the Appeal Brief and the Examiner's response in the Answer, we will decide the appeal on the basis of claim 1 alone. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellants challenge the Examiner's finding that Friske and Marshall would have taught or suggested receiving database structure change commands. We find Appellants' arguments persuasive.

Appellants' claims require "receiving a database change command *to alter the structure* of target database" (claim 1) (emphasis added). Independent claims 13 and 25 contain similar language. The structure of a database is its schema, which describes database objects such as data and indexes (FF 1).

Friske teaches responding to a data reorganization request, where the target data may include data indexes (FF 2). Similarly, Marshall teaches responding to a database reorganization process that may include updates of the database (FF 3). However, the Examiner only shows that the teachings of Friske and Marshall relate to requests to change data or indexes (i.e., database objects). The Examiner does not show that Friske and Marshall teach or suggest receiving requests to change the description of database objects (i.e., the database structure). Therefore, the Examiner does not show that Friske and Marshall would have taught or suggested receiving

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(responding to) a database change command (request) directed to changing the structure (schema) of a database.

For at least these reasons, and since independent claims 1, 13, and 25 contain similar language, we find that Appellants have sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner's 35 U.S.C. § 103(a) rejection of claims 1-38.

CONCLUSIONS OF LAW

Based on the findings of facts and analysis above, we conclude that Appellants have demonstrated that the Examiner erred in finding that Friske and Marshall would have taught or suggested receiving a database change command directed to changing the structure of a database.

DECISION

We reverse the Examiner's decision rejecting claims 1-38 under 35 U.S.C. § 103(a).

REVERSED

msc
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